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ABSTRACT

This paper analyzes available published research on humane education. There is reliable evidence that attitudes of Americans toward animal life are strongly negative, and that it is possible that this negativeness increases as children grow older. Although there is widespread agreement that humane education is possible and desirable in our schools, very few systematic implementations have been reported and there is no evidence to show that any specific technique accomplishes anything. A major drawback is the absence of a clear, operational definition of "human values" and the lack of effective techniques for assessing attitudes towards animal life. In most cases, educators and organizations seem to assume that because they themselves value animal life and have conducted a program of some sort, that the recipients of that program have developed humane attitudes. This is a false and dangerous assumption. There are four basic strategies for promoting humane attitudes: providing information and experiences; value clarification; value education; and behavior modification. Of these strategies, providing information and experiences with animals has been used most frequently. No research is available, but the fact that American attitudes are apparently still inhumane suggests that this technique used alone is not effective. The paper suggests ways to combine this approach with other techniques to provide greater effectiveness. The second technique, value clarification, has received critical attention, but no research is available to support its effectiveness with regard to humane education. Value education has received no attention whatsoever. And, finally, behavior modification--while effective in many other areas of education--has received no reported attention in humane education. Research is needed to find ways to apply these techniques to humane education in such a way as to promote permanent improvements in attitudes toward animal life. (Author/RM)

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SPECIAL REPORT

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HUMANE EDUCATION: THE STATUS OF CURRENT RESEARCH AND KNOWLEDGE

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HUMANE EDUCATION: THE STATUS OF CURRENT RESEARCH AND KNOWLEDGE

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Studies indicate that since 1965 the American dog population has increased by 4.5% yearly, which means that somewhere around June of 1980 the 1965 U.S. dog population will have doubled. This means that by 1980 we will have over 250 million cats and dogs in our country. Altogether, by 1980 we will have over a billion pets of all kinds. (U.S. News & World Report, 1974-1976.) Likewise, memberships in most conservation and environmental and humane groups are increasing. Indeed, it appears that all the concerned had too few places to go. We have now nearly 400 organizations dedicated to some aspect of animals and/or environment with a period of growth beginning in the mid-sixties and continuing today. The National Association for the Advancement of Humane Education (NAAHE), for example, has an enrollment now that includes nearly all 50 states and some areas outside North America. Whitlock's (1973) thorough analysis of the humane movement suggests that various societal factors make the present time "ideal to promote humaneness." (See also Westerlund's works.)

It would be encouraging to know that such statistics meant that animal life was becoming more highly valued in the United States, but other statistics contradict this hope. For example, of the 100 million plus dogs and cats in America, about 30 million will end up in pounds and shelters or on the streets. Of the

animals brought to the shelter, over 90% of the cats will be destroyed and 86% of the dogs will meet a similar fate. In 1974 this added up to over 13.5 million lives! And in our urban areas, acts of cruelty are on an increase. Animals are tortured and mutilated with frightening regularity. Evidence can be found by contacting almost any local animal shelter.

Thus, we are faced with the paradox that both interest in animals and cruelty towards animals are simultaneously increasing.

Thus, we are faced with the paradox that both interest in animals and cruelty towards animals are simultaneously increasing. It would seem important, therefore, to ascertain what attitudes exist toward animal life and to find ways to improve these attitudes if necessary and possible. This review will analyze all available published research on the topic of humane education.

In 1964 Stuart Westerlund conducted a study in conjunction with George Washington University. In it he found that teachers and administrators say we need humane education and such education is feasible (Westerlund, 1965). However, no data was reported on whether it's being done, when it's supposed to be occurring, or the best ways to bring it about.

MEASURING HUMANE ATTITUDES

A common assumption among humane educators is that treatment of animals is an outcome of some internalized "attitude" or "value

system" (Westerlund, 1974, 1975, 1976). Therefore, instead of organizing isolated attempts to prevent animal cruelty or promote pet population control, most humane educators try to develop more favorable attitudes toward animal life. Such educators have taken the logical and apparently necessary step of attacking the underlying cause of inhumane behavior rather than isolated inhumane acts (Peer, 1976; Westerlund 1975, 1976). Similar approaches are often applied in crime prevention. The major advantage of this broader approach is that when a single attitude is changed, the whole spectrum of specific activities which flow from this attitude will also change.

There are two major disadvantages that result from this broader approach. The first disadvantage is that the underlying causes of behavior are sometimes so difficult to reach and to do anything about that the direct attack on the "superficial" behavior is more likely to have lasting results. Examples of the logic of attacking specific behaviors rather than underlying causes will be discussed in the strategies section later in this review.

The second disadvantage of the broader approach is that definitions become completely ambiguous (c.f. Wallace, 1974; Johnson, 1975; Gephart, 1976). Dealing with specific, concrete behavior is relatively easy. For example, if you are trying to stop your child from injuring cats or to teach him/her to pet a dog without obvious fear, you know exactly what you are talking about and can easily measure your success just by observing carefully. But if you want

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to teach him/her to "value animal life" or to "have a humane attitude towards animals," how do you know whether you've succeeded? Values and attitudes are inside the individual's mind, and while you can somewhat accurately determine what your own values and attitudes are, you can only infer those of a child. In the case of your own child, you could, perhaps, make a rather accurate inference about his/her values, especially if you interact with him frequently, but with relative strangers, the inference is much more risky.

What usually happens is something like this: The teacher knows that she has a good attitude and that she values animal life. The teacher then speaks movingly and accurately to her listeners and perhaps performs some child-oriented activity. The listeners obviously enjoy the presentation and ask intelligent questions. The teacher, therefore, assumes that the listeners have adopted her value system. While this assumption is sometimes correct, it is probably more often incorrect; and some way to assess the success

of the presentation would be helpful. (Note that major organizations are just as guilty of this ambiguity and complacent assumption of success as are isolated teachers.)

The problem here is how to operationally define humaneness or whatever it is we are trying to teach.

The problem here is to operationally define humaneness or whatever it is we are trying to teach. If we are going to avoid inaccurate assumptions of success and be relatively certain of what values exist, we need a measuring technique of some sort (Johnson, 1975; Gephart, 1976; Wallace, 1974). Very few attempts have been made to measure attitudes toward animal life. The most thorough attempt is that of Sanders (1974), which describes several distinct factors in such attitudes among 8th, 10th and 12th grade students. The Sanders instrument has good reliability and has been effectively field-tested, but it has the major disadvantage of being extremely susceptible to a social-desirability bias. In other words, there is a good chance that respondents will easily recognize what a "good" person would say and will give that socially desirable response rather than their "true" responses.

Since there is reason to believe that people tend to say one thing and do another about humane values, this social-desirability bias deserves considerable attention.

One obvious way to circumvent the problem is to develop better paper and pencil tests. A second way is not to use tests alone, but

to find some other way to measure the attitudes. Webb, Campbell, Schwartz, and Sechrest (1966) suggest several such unobtrusive measurement techniques which could be adapted to humane education. The basic idea is to collect concrete evidence that the desired change in attitude is occurring. Aside from the Sanders instrument, no 'accurate' measuring techniques are currently available. If humane educators had a way to find out when they are failing and when they are succeeding, they would perhaps almost automatically upgrade their programs.

AMERICAN ATTITUDES TOWARDS ANIMAL LIFE

The only serious attempt to measure the attitudes of Americans toward animal life is that of Sanders (1974). This small-scale study showed that the attitudes towards animal life of eighth grade students actually degenerate as the children get older. He also found that rural students had a more humane attitude than inner-city students, girls more favorable than boys, and pet owners more favorable than non-owners. When he tried measuring the attitudes of college students, Sanders (1977) reports that "the bottom fell out" -- the attitudes were so bad that he "couldn't even measure them"! This disturbing finding, that attitudes toward animal life get worse as children grow older, is surprising to some humane educators, but just what others would expect in modern society. However, a few qualifications need to be added. First, there is the social-desirability bias (discussed in the preceeding section of this review) in the Sanders scale. It is possible that as children grow older they become more honest in their responses rather than more hostile toward animals. Second, it's possible that the older

children would be more cynical toward everything rather than merely more hostile to animals. Both of these possibilities can be tested in replications of Sanders' research. If Sanders' conclusions are verified, it would be useful to find out why the attitudes deteriorate; and if this cause can be isolated, the process can theoretically be reversed.

STRATEGIES OF HUMANE EDUCATION

There appear to be at least four basic strategies for improving attitudes toward animal life: (1) providing information about and experience with animals, (2) value clarification, (3) value education, and (4) behavior modification. Each of these will be examined separately.

(1) The most common approach used by humane educators is to give children information about animals and give them either direct or vicarious experiences with animals. (Westerlund, Whitlock, op. cit.) While the following list is not exhaustive, all of these techniques have been tried:

(a) Proclaim "Be Kind to Animals Week" and provide pictures and literature about animals.
(b) Discuss in class how certain animals are in the process of becoming extinct.
(c) Bring in a guest speaker from the humane society and let the kids interact with a few animals.
(d) Show films and discuss the films.
(e) Take the children on a field trip to the dog pound.
(f) Take the children to a nature center.

(g) Have the teacher use some sort of pre-packaged curriculum material on humane values.

While all these methods have been tried and are in current use, there is absolutely no proof that any of them do any good. If kids say they like these techniques, it's no more likely that they say this because their values have been enhanced than because the speaker was nicer than the teacher, because the discussion got them out of a spelling test, because the film broke a boring routine, because they had fun in the bus on the way to the nature center, or because of a myriad of other irrevelant reasons. We need concrete evidence that these methods accomplish something.

(2) Value clarification consists of a process to identify what one prizes, to choose those things which one cares for most, and to weave those things into the fabric of daily living (Simon and deSherbinin, 1975).

The foremost proponent of value clarification is Sidney Simon, and his works can be consulted for further details on the overall technique (Simon, 1974; Simon, Howe and Kirschenbaum, 1972). Raiff (1974) has outlined how value clarification techniques can be applied to humane education. Presumably, these techniques could either (a) be coordinated by a specialist who would come into the classroom as a resource person, or (b) be pre-packaged in such a way as to enable the classroom teacher to assist in the value clarification process. At present, such resource persons are not available and pre-packaged value clarification materials for humane educators have not been developed. Moreover, no research

report exists to demonstrate that value clarification actually enhances attitudes toward animal life.

(3) According to Kohlberg (1975) there is a simple difference between value clarification and value education. In the former, the purpose is to help people clarify the values which they already possess. When these values are clarified, the persons can act upon them more effectively. In addition, if the clarified values appear undesirable, the persons might change their values. Value education, on the other hand, assumes that some values are better than others and aims to inculcate these higher values. Value clarification and value education become synonymous only when the higher values are so obviously superior that people will automatically aspire to these higher values when the clarification process makes it obvious that they do not already possess them.

A very good example of value education is Lawrence Kohlberg's system of moral development(Kohlberg, 1975). Kohlberg delineated six hierarchical stages of moral reasoning and has devised techniques for helping a person progress from one stage to the next. Kohlberg does not assume that people will advance to a more ideal stage as soon as they clarify their present moral values. Quite the contrary, Kohlberg maintains that progress is made only by being presented with increasingly complex moral reasoning in the proper order. if the reasoning is either too simple or too complex, no progress occurs. For many of us, reasoning in this correct sequence progression never takes place

and this is why many people in our society appear to be "stagnated" at primitive stages of reasoning. While there is probably some connection between moral reasoning and humane education, the present review will pursue Kohlberg no further. He has been introduced as an example of value education as opposed to value clarification. It is quite possible that hierarchical stages can be usefully described for humane values which are similar to those delineated by Kohlberg in moral development. To date, this possibility has gone unexamined and presents an important area for research and development.

An entirely different approach to value education has been successfully field-tested by Milton Rokeach (1973). The procedure is labeled value self-confrontation and is almost astonishing in its simplicity and in the permanence of its effects. The procedure consists of objective feedback about one's own values, attitudes and behaviors to those of significant others. An example from Rokeach's own research on racism will clarify this. Certain experimental subjects discovered -- through an experimental session that supplied objective feedback concerning the subjects' own and other students' values and behavior -- that they held value rankings for equality that were inconsistent with their (assumed) self-conceptions as non-racists. As long as 15 months after the treatment, experimental subjects showed significantly higher rankings for equality than comparable control subjects. More importantly, experimental subjects showed a significantly higher rate of joining the

National Association for the Advancement of Colored Poeple when solicited to do so 3 months after the experimental session, registered significantly more often for ethnic core courses, and changed their academic majors as long as 21 months after the experimental treatment. Penner (1971), Rokeach and Cochrane (1972), and McLellan (1974) have confirmed these findings in subsequent research.

Greenstein (1976) has successfully applied the Rokeach technique to developing attitudes toward children among student teachers. This self-confrontation technique takes less than a half hour to administer in a group setting and has produced effects persisting over a year later. A thorough search of the literature reveals not a single instance of the application of the value self-confrontation technique to humane education and offers another possible fruitful area for research and development.

(4) The application of behavior modification to humane education is relatively straightforward. The educator simply identifies a behavior and rewards the student for correct performance. Conversely, the educator can identify a "bad" behavior (one which exhibits disrespect or hatred towards animals) and then punish the learner whenever he performs the bad behavior. In neither case is there a major concern with wondering "why" the psychodynamics of the individual's personality do not already push the student to spontaneously manifest love for animals. The concern is rather with altering a specific

behavior and then arranging for this behavior to transfer to a wider and wider variety of situations.

It should be pointed out that behavior modification theorists advocate (1) positive reinforcement (reward) in preference to punishment whenever possible and (2) an eventual orientation towards intrinsic (internalized) as opposed to extrinsic reinforcement.

If a behavior is "intrinsically" reinforcing, then the extrinsic reward is used as a mere initial inducement to start the desired behavior. Once the behavior is started, the learner finds it to be intrinsically satisfying and continues to perform the behavior for its own sake when reinforcers are removed.

A good example of behavior modification applied to value education can be found in juvenile delinquency research. Juvenile delinquency is often assumed to be an outward manifestation of internal attitudes and values. Yet juvenile delinquency has been treated with remarkable success at Achievement Place in Lawrence, Kansas, where the supervisory personnel have paid absolutely no attention to the internal origin of delinquency, but have instead rewarded the adolescents for doing specific "good" things (Phillips, 1968). What apparently happens in such cases is that the teenagers learn new behaviors, discover that these behaviors work, and then change value systems to incorporate more similar behaviors. In other words, they do good things and because of this, develop good attitudes and do more good things; and at Achievement Place this worked better than trying to change the

attitudes first. Whether or not behavior modification would work in humane education is at present uncertain.

In addition, one of the most frequent uses of behavior modification is to get students who dislike a school subject to value that subject. In such cases, although the focus is on specific behaviors, an additional permanent change in attitude often seems to occur.

Undoubtedly, behavior modification has often unintentionally been applied to humane education by parents and teachers. For example, many adults who love animals probably do so because they were praised by their parents for doing nice things for animals as children or were mildly punished for doing mean things to animals. In spite of this, there is no recorded research systematically applying behavior modification to humane education.

The following table summarizes the status of research on these four basic strategies.

STRATEGY	STATUS OF RESEARCH
1. Providing information and experiences	Plenty of ideas available..... No research
2. Value clarification	Ideas (Raiff, 1974) No research
3. Value education	No ideas..... No research
4. Behavior modification	No ideas..... No research

In short, there are vast areas of potentially creative ideas which are unexplored or underexplored. And where the ideas are available,

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WHAT TO DO NOW

In bemoaning the lack of research data, we are not saying that researchers need to find out which techniques "work" and which don't. Probably all of these techniques have something to offer (Westerlund, 1976). The major contribution of research will be to determine how to make each of the strategies work to maximum effectiveness and which can be implemented most inexpensively to concrete settings.

It's possible that these strategies can be combined. For example, would value self-confrontation before a field trip enhance the effectiveness of a field trip? Would behavior modification during the trip enhance its effectiveness?

It's possible that these strategies can be combined. For example, would value self-confrontation before a field trip enhance the effectiveness of the field trip? Would behavior modification during the trip enhance its effectiveness? Can the topic

of the field trip be selected in such a way as to maximize value eduation?

Until recently, museum usage showed a similar lack of research. But recent research (Screven, 1969, 1973; Nicol, 1969; Shettle, 1968; White, 1967) has shown that there are good and bad ways to use museums. For example, setting up a machine to pretest museum-goers before they view a certain exhibit enhances what they will learn from the exhibit. Likewise, providing objectives concerning what can be learned and reinforcing viewers for correctly interacting with the exhibits increases learning. Analogously, it is possible that the learning value of nature preserves, zoos, and classroom exhibits can be increased to induce changes in attitudes toward animal life.

The present review and analysis has assumed that humane education is directed towards children. A major question is: Are children really the right target audience (Van Der Sterre, 1975)? Can lasting changes in society's attitudes and behaviors be induced by working with children? Would it make more sense to work with their parents? If children are the appropriate target audience, are schools the right place to approach them? Would it be more effective to promote humane education through Mr. Rogers, Sesame Street, or The Million Dollar Man instead? It seems pos-

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sible that more could be accomplished by having the Fonze rescue an injured duck than by endless hours of classroom instruction.

Another question is: Will improving attitudes toward animals simultaneously produce more favorable attitudes toward human beings? Paradoxically, some research leads to the opposite conclusion. Boyle (1975) has shown that as attitudes toward animal life improve, attitudes toward human life deteriorate, though this research has methodological weaknesses which the author himself recognizes. Nevertheless, the fact remains that there is no empirical data to support the assertion that when we learn to love animals, we learn to love people. If this assertion can be supported, it would be easier to gain widespread support for humane education efforts. More likely, the transfer of humane values to human values is not automatic, but can be induced. If this is the case, methods for ensuring the transfer need to be developed. Of course, even if there is found to be no relation between humanitarian and humane values, humane values could still be defended as important in themselves, with no further need for vindication.

WHO CARES ABOUT HUMANE EDUCATION?

The following is a brief list of behaviors which the Board of Directors of a humane group like NAAHE or the Audubon Society would unanimously consider "inhumane."

(1) Pouring gasoline on a live cat and igniting it.

(2) Nailing a live bird to a tree.

(3) Allowing an unspayed female dog to roam free.

(4) Beating baby seals to death with clubs.

(5) Hunting the blue whale to extinction.

(6) Forcing X number of species of animals per decade into extinction.

In spite of the "enlightened" agreement that all of these behaviors are inhumane, these and others far worse occur daily. A practical problem is that in trying to enlist popular support to combat such behaviors, there will be varying degrees of popular sympathy. No research is available to show what values Americans (or subgroups of Americans) are willing to support, which they would oppose, and which they are uninterested in. While humane organizations are often interested in all humane values, it would be useful to differentiate between areas where only a minimal push is needed and those which will meet with widespread resistance and will, therefore, require massive education and value-change efforts.

SUMMARY

In summary, there is reliable evidence that attitudes of Americans toward animal life are strongly negative, and it is possible that this negativeness increases as children grow older. Although there is widespread agreement that humane education is possible and desirable in our schools, very few systematic implementations have been reported and there is no evidence whatsoever to show that any specific technique accomplishes anything. A major drawback is the absence of a clear, operational definition of "humane values" and the lack of effective techniques for assessing attitudes towards animal life. In most cases, educators

and organizations seem to assume that because they themselves value animal life and have conducted a program of some sort, therefore, the recipients of that program have developed humane attitudes. This is a false and dangerous assumption.

Of the four basic strategies available for humane education, providing information and experiences with animals has been used most frequently. No research is available, but the fact that American attitudes are apparently still inhumane suggests that this technique used alone is not effective. This review has suggested ways to combine this approach with other techniques to provide greater effectiveness.

A second strategy, value clarification, has received critical attention with regard to humane education, but no research is available to support its effectiveness. The possible application of a third set of strategies, value education, has received no attention whatsoever.

And, finally behavior modification -- while effective in many other areas of education -- has received no reported attention in humane education. Research is needed to find ways to apply these techniques to humane education (whether in the schools or elsewhere) in such a way as to promote permanent improvements in attitudes toward animal life.

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